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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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IBM CORP (YA) C/O YEE & ASSOCIATES PC P.O. BOX 802333 DALLAS, TX 75380			EXAMINER DUFFY, DAVID W	
			ART UNIT 3714	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/941,251

Applicant(s)

BANERJEE ET AL.

Examiner

David W. Duffy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8, 12-18, 21-33, 35-41 and 44-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 12-18, 21-33, 35-41 and 44-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of Claims***

1. This office action is in response to the amendment filed 06/27/2007 in which applicant amends claims 1, 3, 6, 17, 21-23, 25, 28-29, 44-47 and 51 and cancels claims 11, 19-20, 34 and 42-43. Claims 1-8, 12-18, 21-33, 35-41 and 44-51 are pending.

### ***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-3, 23-25, 47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (US 5885087) in view of Sugimoto (US 6755661).

4. In regards to claims 1, 3, 23, 25, 28 and 47, Thomas discloses a test timing system that discloses a computerized testing device that conducts testing for a user whereby a question is presented to the user and the time taken by the user to answer the question is tracked and displayed and may be compared to a predetermined time (2:5-20 and 4:45-65). Examiner contends that the constant display of the elapsed time constitutes an alert and that the predetermined time for a question used to compare to the elapsed time disclosed in the reference would constitute an alert threshold. Thomas further discloses that the system may be used to practice examination skills and improve their test taking skills (3:4-14) and that the system maintains player profiles in order to provide a history of the user's progress including performance by subject or topic (7:43-58). Thomas lacks explicitly disclosing that the alert schedule is based on the profile of the user's previous performance, the relative question difficulty, and alert

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thresholds and that presentation of test questions are based on levels of difficulty of the test questions and the ability of the test taker.

5. In related prior art, Sugimoto discloses a testing system that adapts the timing of a test question when a user takes less than an allotted time on a question and provides the extra time on a later question for the user (abstract and 18:48-54). Sugimoto further discloses that profiles of the test taker are maintained, including skill level of the user (9:5-7 and fig 9, user ID and skill code), and the profile is used to determine questions presented to the test taker (9:17-20), a question database that includes information on the question difficulty to be related to the user's skill setting (6:5-7) and a preset time limit for each question (6:63-40), which examiner contends is analogous to an alert threshold, that is changed by the system as the user's skill is determined. One skilled in the art would recognize the advantages of providing more time on questions a user has trouble with and less time on questions the user finds easy in order to complete an exam in the allotted time with the most correct answers possible thus improving the test taker's performance and tailoring a test to a user's ability in order to help them improve incrementally.

6. Therefore it would have been obvious to one skilled in the art at the time to have modified Thomas in view of Sugimoto to include the adaptive timing system in order to further aid the test taker in completing the test in the allotted time while giving as much time as necessary to correctly answer questions and customize the tests presented to the user's ability.

7. In regards to claims 2, 24 and 48, Thomas discloses the system is a computer program on a computer (3:53-65).

8. Claims 4-5, 26-27, 49 & 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (US 5885087) in view of Sugimoto (US 6755661) as applied to the claims above and further in view of admitted prior art.

9. In regards to claims 4, 5, 26, 27, 49 and 50, the billing for services rendered is regarded as old and well known in the art in view of the admitted prior art (see arguments).

10. Claims 6, 12, 29, 32-33, 35, 40-41 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (US 5885087) in view of Sugimoto (US 6755661) and further in view of Hoehn-Saric et al. (US 5915973).

11. In regards to claims 6, 29, 32-33 and 46, Thomas in view of Sugimoto discloses the testing system described above for claim 1 where the system may operate over a network, which examiner is interpreting to be an interface, with a client (3:63-65). Thomas lacks in disclosing the use of instant messaging.

12. In related prior art, Hoehn-Saric teaches that the administrator of a test has great flexibility in sending and receiving messages associated with the administration of a test (Col 6 and 8). This flexibility may include sending and responding to messages with the test product users as quickly as the physical interconnection is capable of processing and sending them, making them "instant messages". One skilled in the art would recognize the advantages of providing a messaging system that provides rapid communication in a timed testing situation.

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13. Therefore, it would have been obvious to one of ordinary skill in the art to provide test examination system as disclosed by Thomas with messaging capability to take full advantage of the speed of the remote connection with the test product user to provide the ability to send and receive instant messages as taught by Hoehn-Saric for the purposes of distributing test evaluations to users in a more timely fashion in a time critical environment.

14. In regards to claims 12 and 35, Thomas discloses that the score for the test is stored in permanent storage (6:38-41).

15. In regards to claims 17 and 40, the combination discloses the system of claim 29 above where the alert of the elapsed time is constant and may be compared to a predetermined value (4:45-60). The system of Thomas displays the alert throughout the question but due to the nature of computing it would only be updated periodically as displays are not continuous.

16. In regards to claims 18 and 41, the combination made discloses that the question timing may be compared to predetermined data. Previous timing data for the same question would be an obvious type of data to use as a predetermined time to compare the current time against, as that would be an indicator of past performance by test takers.

17. Claims 7-8, 13, 16, 30-31, 36 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (US 5885087) in view of Sugimoto (US 6755661) and Hoehn-Saric et al. (US 5915973) as applied to the claims above and further in view of admitted prior art.

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18. In regards to claims 7-8 and 30-31, the billing for services rendered is regarded as old and well known in the art in view of the admitted prior art (see arguments).

19. In regards to claims 13 and 36, that test creators may be different entities than test administrators is regarded as old and well known in the art in view of the admitted prior art (see arguments).

20. In regards to claims 16 and 39, that payment for testing services would be based on the number of people taking a test is regarded as old and well known in the art in view of the admitted prior art (see arguments).

21. Claims 14-15, 21-22, 37-38 and 44-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (US 5885087) in view of Sugimoto (US 6755661) and Hoehn-Saric (US 5915973) as applied to claim 6 above, and further in view of Kershaw et al. (US 5827070).

22. In regards to claims 14 and 37, Thomas in view of Sugimoto and Hoehn-Saric discloses the combination as made for claims 6 and 29 above. Thomas further discloses the maintenance of testing records and comparison to ideal timing values (6:37-50 and 4:53-60). The combination made lacks in disclosing session identification or proctor identification to match or deliver data.

23. In an analogous testing system, Kershaw discloses a the collection of statistical data on all examinees taking a certain test (2:8-16) as well as the recording of a test program id, registration id, test center id, and workstation id for each test taker in order to provide an audit trail (73:27-74:26). One skilled in the art would recognize the

advantage of maintaining detailed records on test takers to provide accurate records to ensure that no cheating or errors occurred.

24. Therefore it would have been obvious to one skilled in the art at the time to combine the test administration system of Kershaw with the timing and messaging system made from the combination made for claim 6 to provide a test timing system for a number of users while maintaining accurate and detailed records of the test takers.

25. In regards to claims 15 and 38, the combination made above for claim 14 discloses the tracking of workstation and test id for each test taker. The combination made lacks in explicitly stating that the timing data is sent to the proctoring device based on a proctor id. However, it would have been obvious to base the sending of timing data on proctor id as testing centers commonly provide multiple tests simultaneously and the individual proctors would only need the timing data for the tests they are monitoring thus reducing the data traffic overhead.

26. In regards to claims 21 and 44 and 22 and 45, the combination made above for claims 19 and 42 and 6 and 29 respectively discloses the retention of records to predict test taker performance. The combination made lacks in disclosing that the information would be used in future tests.

27. In an analogous testing system, Kershaw discloses the retention of testing data for the creation of future tests (2:8-16). One skilled in the art would recognize the advantage of using the elapsed time of particular test questions in addition to the answers given in determining the difficulty of a question.



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28. Therefore it would have been obvious to one skilled in the art at the time to combine the test question timing data of the combination of Thomas and Sugimoto with the analysis of test data presented in Kershaw in order to better determine and tune the difficulty of standardized tests.

29. Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kershaw in view of Thomas (US 5885087), Hoehn-Saric (US 5915973) and Sugimoto (US 6755661).

30. Kershaw discloses a test administration system that records statistical data about test takers and identification system about each test taker (2:8-16 and 4:3-5:2). Data recorded includes session identification, test identification with several tests listed suggesting the capability for multiple tests to be presented by the system (73:35-74:27). While Kershaw does track test results for the creation of performance statistics, it lacks in explicitly stating the tracking of question timing data or instant messaging.

31. In analogous testing system, Thomas discloses the tracking of question timing data and the comparison to predetermined time data (2:5-20 and 4:45-65). One skilled in the art would recognize the advantage of including time data in the statistics gathered by Kershaw in order to more accurately determine overall difficulty of a question as well as the notification feature in order to provide to the test takers time indication as standardized tests are time limited and keeping track of user's time is very important (4:49-51).

32. In an analogous test administration system, Hoehn-Saric discloses that the administrator of a test has great flexibility in sending and receiving messages

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associated with the administration of a test (Col 6 and 8). This flexibility may include sending and responding to messages with the test product users as quickly as the physical interconnection is capable of processing and sending them, making them "instant messages".

33. All of the component parts are known in Kershaw, Thomas and Hoehn-Saric. The only difference is the combination of the "old elements" into a single system by including the component parts in a single administrative system.

34. Thus it would have been obvious to one having ordinary skill in the art to include the instant messaging taught by Hoehn-Saric and the test question timing of Thomas with the test administration system of Kershaw, since the operation of the instant messaging and the question timing is not dependant on the operation of the test administration system and the other components could be used in combination with a test administration system to achieve the predictable results of a test administration system with test timing and instant messaging.

35. The combination made lacks explicitly disclosing that the alert schedule is based on the profile of the user's previous performance, the relative question difficulty, and alert thresholds and that presentation of test questions is based on levels of difficulty of the test questions and the ability of the test taker.

36. In related prior art, Sugimoto discloses a testing system that adapts the timing of a test question when a user takes less than an allotted time on a question and provides the extra time on a later question for the user (abstract and 18:48-54). Sugimoto further discloses that profiles of the test taker are maintained, including skill level of the user

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(9:5-7 and fig 9, user ID and skill code), and the profile is used to determine questions presented to the test taker (9:17-20), a question database that includes information on the question difficulty to be related to the user's skill setting (6:5-7) and a preset time limit for each question (6:63-40), which examiner contends is analogous to an alert threshold, that is changed by the system as the user's skill is determined. One skilled in the art would recognize the advantages of providing more time on questions a user has trouble with and less time on questions the user finds easy in order to complete an exam in the allotted time with the most correct answers possible thus improving the test taker's performance and tailoring a test to a user's ability in order to help them improve incrementally.

37. Therefore it would have been obvious to one skilled in the art at the time to have modified Thomas in view of Sugimoto to include the adaptive timing system in order to further aid the test taker in completing the test in the allotted time while giving as much time as necessary to correctly answer questions and customize the tests presented to the user's ability.

### ***Response to Arguments***

38. The examiner notes that the applicant has not adequately challenge examiner's OFFICIAL NOTICE on claims 4-5, 7-8, 13, 26-27, 30-31, 35 and 49-50. As such examiner's assertion of the common knowledge or well known in the art statement is taken to be admitted prior (see MPEP 2144.03 part C).

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39. Applicant's arguments with respect to claims 1-3, 6, 12, 14-18, 21-25, 32-33, 36-41, 44-48 and 51 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

40. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David W. Duffy whose telephone number is (571) 272-1574. The examiner can normally be reached on M-F 0830-1700.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on (571) 272-6996. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DWD



/Corbett Coburn/  
Primary Examiner  
AU 3714